



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/901,981

07/10/2001

Toru Fujiwara

0941.65686

7925

7590

04/19/2005

Patrick G. Burns, Esq.  
GREER, BURNS & CRAIN, LTD.  
Suite 2500  
300 South Wacker Dr.  
Chicago, IL 60606

EXAMINER

MEEK, JACOB M

ART UNIT

PAPER NUMBER

2637

DATE MAILED: 04/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/901,981

Applicant(s)

FUJIWARA ET AL.

Examiner

Jacob Meek

Art Unit

2637

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 10 July 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1 - 13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,5,6,7,8, 11 - 13 is/are rejected.
- 7) ☒ Claim(s) 3, 4, 9, and 10 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 July 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 7/01, 7/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1, 2, 5, 6, 7, 8, and 11 – 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marukawa (US-5,508,993).

With regard to claim 1, Marukawa teaches a method for data reproduction for reproducing data corresponding to a state transition pass selected as being most likely according to a Viterbi decoding algorithm from a reproduction symbol supplied from a recording medium, the method comprising the steps of: detecting at least one state of reproduction signal according to data used for selecting state transition pass (see column 12, lines 11 – 29 where this is interpreted as equivalent), calculating an average values of reproduction signal in state detected by step of detecting (see column 12, lines 43 –52 where this is interpreted as equivalent); and following a fluctuation amount of a DC component of reproduction signal according to average value (see column 12, line 66 – column 13, line 9 where this is interpreted as equivalent). Murakawa's circuit arrangement appears to be different than the applicant's invention, however, it would have been obvious to one of ordinary skill in the art at the time of invention that the circuit elements could be rearranged.

With regard to claim 2, Murakawa teaches a data reproduction method wherein step of detecting includes the steps of: outputting data supplied to a pass memory of a Viterbi detector as data used for selecting state transition pass; and producing a state signal

indicating state according to data used for selecting state transition pass (see Figure 5, and column 12, lines 17 – 22 where this is interpreted as equivalent).

With regard to claim 5, Murakawa teaches a data reproduction method wherein step of following includes adjusting the fluctuation amount of the DC component according to average value (see column 12, line 66 – column 13, line 9 where this is interpreted as equivalent).

With regard to claim 6, Murakawa teaches a data reproduction method wherein state is one of a peak, a center, and a bottom portion (see Table 1, judgment levels, where this is interpreted as equivalent).

With regard to claims 7, and 13 Murakawa teaches an apparatus (see Figure 1) for the reproduction of magneto-optical signals utilizing the method of claim 1, and therefore it would have been obvious considering the aforementioned rejection of claim 1.

With regard to claim 8, 11, and 12 Murakawa teaches an apparatus (see Figure 1) for the reproduction of magneto-optical signals utilizing the method of claims 2, 5, and 6 respectively and therefore it would have been obvious considering the aforementioned rejection of claims 2, 5, and 6.

#### ***Allowable Subject Matter***

2. Claims 3, 4, 9, and 10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Other Cited Prior Art***

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Tobita (US-5,506,827); Hayashi (US-5,508,993); Ohta (US-6,614,841); Miyashita (US-6,618,337); Nakajima (US-6,807,134); Ogura (US-


6,674,707); Hiyaami (US-6,819,724); and Miyauchi (US-6,826,722) all disclose variations of applicant's claimed invention. NPL references are shown as other technology samples.

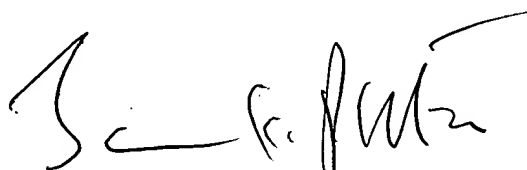
### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacob Meek whose telephone number is (571)272-3013. The examiner can normally be reached on 8:00 - 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on (571)272-2988. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JMM 

  
JAY K. PATEL  
SUPERVISORY PATENT EXAMINER